



BULLETIN OF FOREIGN PLANT INTRODUCTIONS.

No. 15. April 7 to 27, 1909.

NEW PLANT IMMIGRANTS.

ALEURITES CORDATA. 25080. From Tokyo, Japan. Purchased from Japan Seed & Plant Co. Received March 23. "This shipment of seeds was imported for acclimatization experiments and for the extraction of oil to be used for comparison with No. 25081. It is a tropical or semi-tropical plant and grown only in the provinces to the south of Tokyo (36° lat.). The seeds are very small compared with those of the other species of Aleurites, being about the size of large castor oil seeds, which they very much resemble. The oil expressed from them is comparable to the more abundant tung oil of China and to perilla oil, which is largely substituted for it in Japan, as it can be more cheaply grown. In Japan, as in China, the wood oil is grown on land not suited for general farming." (Fischer.)

ALEURITES FORDII. 25081. From Hankow, China. Purchased thru Hon. Wm. Martin. "This shipment of seeds was imported for the purpose of continuing on a larger scale some experiments commenced four years ago in the acclimatization of the tree which produces the Tung oil or China wood oil of commerce. The Tung tree is distributed widely throughout the provinces drained by the Yangtse. The trees are restricted to the thin, dry soils of the hilly regions where farming is unprofitable and where also the Chinese claim that they bear larger crops. The tree should be tried, not only for its valuable seeds, but as an ornamental. It attains a height of from 20-40 feet and its large, heart-shaped leaves, smooth green bark and striking panicles of white flowers, slightly tinged with red, which appear with the leaves in the spring, make it a very desirable ornamental tree

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at all seasons of the year. The fruits which ripen in September are the size of a large, unhulled black walnut, and contain five warty seeds the size of chestnuts and of the form of castor oil seeds. The wood oil now imported is used almost exclusively in varnish making, but the manufacture of such products as linoleum, enamel paints and high grade elastic oil cloths has just commenced, while other uses have been suggested. It belongs to the class of drying oils, typified by linseed, but it is much harder, quicker drying and more impermeable to water, tho less light-proof and elastic. Used in conjunction with linseed, it gives most excellent results, especially for outdoor use, where such qualities as it possesses are highly desirable. (Fischer.)

AMYGDALUS PERSICA. 25309. Blood peach, "Tenshin," from Yokohama, Japan. Purchased from Yokohama Nursery Co. Received April 21. For propagation; plants available later. If as per request, this is an unusually large fruited variety with a distinct beak and with blood red colored flesh from skin to stone; quality fair. (Fairchild.)

ANACARDIUM OCCIDENTALE. 25245. From Ancon, Canal Zone, Panama. Presented by Mr. H. F. Schultz. Received April 8. A yellow fruited variety of cashew. Tree 30-40 feet high. The gum, sap, bark and seed are all employed either for dyeing, tanning or medicine. The fruit is eaten by the natives and the wood used for packing cases, boat building and charcoal. For propagation; plants available later.

CAESALPINIA CORIARIA. 25281. From Rio Hacha, Colombia. Presented by Sr. Jose Bolivar Nunez. Received April 17. "A leguminous tree from the wet sea-shores of Central America. Each tree is said to produce annually 100 lbs. of pods, the husks of which, commercially known as Divi-Divi, are regarded in India as the most powerful and quick-acting tanning material." For propagation; plants available later.

CAMOENSIA MAXIMA. 25107. From Angola, West Africa. Presented by Mr. John Gossweiler. Received March 4. A new importation of seed of what is probably the largest-flowered and certainly one of the most delicately beautiful vines in the world. Its pure white fluted petals are margined with gold, changing to a darker tinge with age, and have a delicious fragrance when first opening. The individual flowers are sometimes eight inches long. This magnificent vine adorns the tops of lofty trees on the outskirts of forests in tropical Africa. The clusters are pendulous and sometimes contain nearly a dozen flowers. The great drawback to the cultivation of this noble plant is that it will bloom only in hot houses of considerable size.

EUCALYPTUS. 25246. From Algeria. Presented by Dr. L. Trabut. Received April 7. "A hybrid of *A. botryoides* x *A. rostrata*. Tree very vigorous, wood very good, growth rapid, stem straight and high. Comes true to seed." (Trabut.)

LITCHI CHINENSIS. 25274. From Foochow, China. Received thru Mr. Samuel L. Gracey, American Consul, at Plant Introduction Garden, Chico, California, March 30. For further description see numbers 10670-673, 14888 and 16237-243.

PELARGONIUM ODORATISSIMUM. 25253. From Valencia, Spain. Presented by Mr. J. L. Byrne. Received April, 1909. "There is only one variety of the rose geranium cultivated in this region for its perfume. Judging from inquiries received at this Consulate it would appear that an impression prevails in the United States that the rose geranium employed in the famous essence manufactory near this city is a special variety peculiar to the district. Such, however, is not the case, but the plants raised in the vicinity of Valencia have been distinguished from time immemorial by the intensity of their fragrance and the quantity of essential oil they yield, qualities which undoubtedly depend to some extent on local climatic and soil conditions, as the same geranium transplanted to other European countries, or even to other regions of

Spain itself, loses considerably in this respect. The plants used in the perfume distillery are grown close to the sea on soil so extremely light and sandy that in some places it looks like a continuation of the sea shore. (Byrne.)

PHASEOLUS ANGULARIS. 25255. Grown at Arlington Farm, Virginia, season of 1908. "Grown from Agrostology No. .0516. This seed was received from the Tokio Botanical Garden in 1907. The seed is a pale straw color or nearly white, much lighter than any other variety yet obtained. (C.V. Piper.) For distribution by Office of Agrostologist.

PHYLLOSTACHYS SP. 24759-761. From Nagasaki, Japan. Purchased from Japanese bamboo growers by Wm. D. Hills. Received at Plant Introduction Garden, Chico, Cal., Feb. 9. "Three of the most valuable Japanese timber bamboos for experimental growing on a commercial scale. A few will probably be available for general distribution in the Fall. 24759. *Phyllostachys mitis*. Moso. "This is the great edible bamboo of China and Japan and the largest of the hardy species, the culms attaining a maximum height of 70-80 feet and a diameter of 6-8 inches. 24760. *Phyllostachys quilioi*. Madake. "The great timber bamboo of China and Japan and the second largest in size, the culms attaining a maximum height of 60-70 feet and a diameter of 6 inches. The species is considered somewhat more hardy than *P. mitis*, the rhizome is more vigorously spreading and the wood is harder. It is the most useful of the East Asiatic bamboos." 24761. *Phyllostachys henonis*. Hachiku. Next in importance and smaller than the 2 preceding species with a height of from 30-40 feet and a diameter of 3-4 inches. The stem nodes are flatter than those of the Madake, the culms are thinner walled and the sprouts are produced earlier." (Fischer.)

PINUS GERARDIANA. 25316. From Fort Sandeman, Baluchistan, from Lieut. Col. G. C. French. Received April 22. "A dry land pine from mountain slopes whose climate resembles that of Utah and Arizona. May be hardy enough to stand

the low temperatures further north." (Fairchild.)

PISUM ARVENSE. 25280. From Nephi, Utah. Presented by Mr. F. D. Farrell. Received April 19. "These were grown in 1908 from seed obtained from Colorado. Variety not known. Best yielding variety in 1908." (Farrell.) For preliminary tests by Agrostologist. If satisfactory seeds will be available later.

SACCHARUM OFFICINARUM. 25225-242. Eighteen varieties of seedling sugar cane from Central Soledad, Cienfuegos, Cuba. Presented by Mr. Robert M. Grey, Harvard Botanical Experiment Station. Received at Brownsville, Texas, Feb. 18. Considered by Mr. Grey promising for trial in the South.

STIZOLOBIUM SP. 25261-262. From Saigon, Cochín China, Presented by the Director, Botanical Garden. Received April 12. 25261 is the Florida velvet bean, and it is interesting in that this is the first time it has ever been received back from a foreign country, although an enormous distribution has been made of it. For preliminary tests by Agrostologist. If satisfactory seeds will be available later.

STIZOLOBIUM SP. 25263. From Calcutta, India. Presented by Mr. Wm. H. Michael, Consul-General. Received April 13. "These were collected from wild plants in the neighborhood of Calcutta, but the mucuna cannot be said to be cultivated here." (Michael.) For preliminary tests by Agrostologist. If satisfactory seeds will be available later.

TRITICUM. 25243. From Seoul, Korea. Presented by Mr. Thos. Sammons, American Consul General. Received April 7. "The Korean variety of wheat, although very poor, grows well." Sammons.)

ZEA MAYS. 25252. From a highland valley near Cuzco, Peru, (11,500 feet.) Presented by Mrs. Harriet Chalmers Adams, February, 1909. "Red corn of the Quichuas." (Adams.)

NOTES FROM FOREIGN CORRESPONDENTS.

- AFRICA, Benguella, Angola. T. W. Woodside, Feb. 20. Is sending some bulbs of the bulb rubber, whose underground bulbs about the size of a small turnip furnish a rubber said to have poor keeping qualities but worthy of investigation. He sends seeds of a rubber tree grown there; and also sample of an unidentified fibre plant that he thinks may be valuable.
- AFRICA, Zomba, Nyasaland Protectorate. Stewart G. McCall, March 5. Will send Mr Kearney Egyptian cotton to compare with our American grown Egyptian cotton to show the effects of climate. Will also send Agricultural Report and meteorological bulletin from that colony.
- ARGENTINE REPUBLIC, Buenos Aires. Carlos Thays, March 20. Sends leaves of Bambusa Tacuara, a splendid species of bamboo from the northern part of the Republic, and Chusquea quila, a bamboo from the southern part of the country.
- AUSTRALIA, Brisbane. J. F. Bailey, Feb. 24. Will send Citrus Planchoni and Atalantia glauca as soon as possible. These are both promising for use in citrus breeding work.
- BENGAL, Pusa. A. Howard, March 30. Is sending 4 varieties of Bael fruits. This a handsome tree of India. The fruit is much like an orange in shape, color and size. It is eaten by the natives and used by the white men for its medicinal properties and to make a pleasant, refreshing sherbet. For further description see Bulletin No. 9, under Belou marmelos.
- BRAZIL, Piracicaba. J. Wm. Hart, March 30. Will send seeds of the Carnuba palm as soon as they ripen. This is the palm whose wax is used for making graphophone cylinders.
- CHINA, Chinchow, Chang'sha. W. T. Locke, Feb. 21. In Nov. will send seeds of two varieties of Tung shu (wood oil.) He mentions a variety of Tung which does not yield oil, but is valued for its close-grained, cream-colored wood. He also sends sample of wood and acorns of Quercus glaucus, a magnificent evergreen Japanese oak, growing to 80 feet high. Its hard wood excellent for manufacture of tools. Not hardy.

CHINA, Hong Kong. Amos P. Wilder, Consul General, March 9.
Is sending samples of three kinds of native rices.

CHINA, Ing-ang. Walter W. Williams, March 6. Sends samples of several varieties of soy beans from the Min River, 200 miles west of Foochow. Suggests the use of the China bamboo for paper.

HONDURAS, Tegucigalpa. R. Fritzgartner, March 27. Will send seeds of Matasano (*Casimiroa edulis*) when the fruits are ripe. It is an excellent fruit, but too soft for shipment.

JAVA, Lawang. M. Buysman, March 17. Will try to get *Garcinia dioica*; also offers to send *Achras Sapota*, *Nephelium lappaceum*, *Lansium domesticum*, *Persea gratissima*, *Artocarpus integrifolia*, and *A. incisa*.

JERUSALEM. Ernest F. Beaumont. Is sending sample of the cultivated oats grown there; will send wild oats in season.

RECENT VISITORS.

CHINA. Mr. W. Henry Grant of New York, Secretary and Treasurer of the Canton Christian College. It was proposed to Mr. Grant that he encourage the establishment of a small nursery of American plants at Canton; that the Department would assist the College in doing this, with the understanding that Mr. Groff, who is to have charge of the agricultural work at the College, would collect and assemble in this nursery valuable varieties of South Chinese agricultural and horticultural plants. These he would use as exchange material with the United States Government. Mr. Grant has sent a number of photographs of date palm trees in the vicinity of Sinai.

EGYPT, Cairo. Osborn Ashton. He accompanied an expedition of this office made to the Egyptian oasis of Siwa. After his return to Egypt he will send the Department olive and lemon cuttings and samples of the golden date of Siwa, which is a very delicate date and he says that the growers in the oasis say that the stone is so small that it can be eaten with the fruit.

NICARAGUA. Mr. B. Barlow, a graduate of Michigan Agricultural College, and for some time bacteriologist of the Ontario, Canada, Experiment Station. He is an enthusiastic collector of plants, and owing to ill health desires to go to Nicaragua. He proposes to study the nodule bearing leguminosae of the tropics, being a specialist on nodule-bearing bacteria.

NORWAY, Roikenvik. Lars Hvinden. Molsted clover, a very old variety is grown in Southern Norway. A very cold-resistant strain and longer lived than American or German clover. He will send samples of this and another variety from Middle Norway. The minimum temperature there is 40° below zero; commonly 4° below. Ground frozen a yard deep, but generally covered with snow.